

**AMENDMENT TO THE CLAIMS**

1-3. (Canceled)

4. (Currently amended) A solid state imaging apparatus, comprising:

a plurality of pixels two-dimensionally arranged in a vertical direction and a horizontal direction wherein each of the plurality of pixels has a color filter having a different color from color filters of vertically or horizontally adjacent pixels; and

a signal output circuit configured to perform one of two types of operations,

wherein the signal output circuit includes:

a first shift register for sequentially outputting selection signals, which ~~select~~ drive each pixel, to all of the plurality of the pixels either in a vertical or a horizontal direction, and

a second shift register for continuously outputting the selection signals to some of the plurality of pixels having color filters of the same color either in a vertical or a horizontal direction, and partially

wherein each of the selection signals of the first shift register and each of the selection signals of the second shift register are output to a corresponding pixel included in a pixel group arranged in the same direction as the first and second shift registers, such that all pixels in the pixel group receive a selection signal from the first shift register and the second shift register.

5. (Currently amended) A solid state imaging apparatus, comprising:

a plurality of pixels two-dimensionally arranged in a vertical direction and a horizontal direction wherein each of the plurality of pixels has a color filter having a different color from color filters of vertically or horizontally adjacent pixels; and

a signal output circuit configured to perform one of two types of operations,  
wherein the signal output circuit includes:

a shift register for sequentially outputting ~~via a selector switch~~ selection signals, which  
~~select~~ drive each pixel, to all of the plurality of pixels either in a vertical or a horizontal direction,  
and

an operation switching circuit for outputting the selection signals from the shift register to  
each pixel, the operation switching circuit configured to switch between a first signal  
transmission method in which the selection signals are sequentially output to ~~[[all]]~~ some pixels  
either in the vertical direction or the horizontal direction and a second signal transmission  
method in which the selection signals are continuously output to all pixels having color filters of  
the same color either in the vertical direction or the horizontal direction, and partially

wherein in both of the first and second signal transmission methods, each of the selection  
signals of the shift register is output via the operation switching circuit to a corresponding pixel  
included in a pixel group arranged in the same direction as the shift register, such that all pixels  
in the pixel group receive a selection signal from the shift register.

6-11. (Canceled)

12. (Currently amended) A camera comprising a solid state imaging apparatus,  
wherein the solid state imaging apparatus comprises:

a plurality of pixels two-dimensionally arranged in a vertical direction and a horizontal  
direction wherein each of the plurality of pixels has a color filter having a different color from  
color filters of vertically or horizontally adjacent pixels; and

a signal output circuit configured to perform one of two types of operations,  
wherein the signal output circuit includes a first shift register for sequentially outputting selection signals, which ~~select drive~~ each pixel, to all of the plurality of the pixels either in a vertical or a horizontal direction and a second shift register for continuously outputting the selection signals to some of the plurality of pixels having color filters of the same color either in a vertical or a horizontal direction, ~~and partially~~

wherein each of the selection signals of the first shift register and each of the selection signals of the second shift register are output to a corresponding pixel included in a pixel group arranged in the same direction as the first and second shift registers, such that all pixels in the pixel group receive a selection signal from the first shift register and the second shift register.

13. (Canceled)

14. (Previously presented) The solid state imaging apparatus of claim 4, wherein the second shift register repeats, after continuously outputting signals of the plurality of pixels having color filters of the same color, an operation which continuously outputs signals of the plurality of pixels having color filters of a different color, on a basis of each pixel mixture unit consisting of a plurality of pixels, and

the pixel mixture unit consists of 25 pixels arranged in five rows and five columns.

15. (Previously presented) The solid state imaging apparatus of claim 5, wherein the second signal transmission method repeats, after continuously outputting signals of the plurality of pixels having color filters of the same color, an operation which continuously outputs signals

of the plurality of pixels having color filters of a different color, on a basis of each pixel mixture unit consisting of a plurality of pixels, and

the pixel mixture unit consists of 25 pixels arranged in five rows and five columns.

16. (Previously presented) The solid state imaging apparatus of claim 4, wherein the first shift register performs a regular operation, and a second shift register performs a pixel mixture operation.

17. (Previously presented) The solid state imaging apparatus of claim 16, wherein a static image mode is executed by the regular operation, and a moving image mode is executed by the pixel mixture operation.

18. (Previously presented) The solid state imaging apparatus of claim 5, wherein the first signal transmission method is a sequential scanning method, and the second signal transmission method is a pixel mixture scanning method.

19. (Previously presented) The solid state imaging apparatus of claim 18, wherein a static image mode is executed by the sequential scanning method, and a moving image mode is executed by the pixel mixture scanning method.

20. (Previously presented) The solid state imaging apparatus of claim 4, wherein the solid state imaging apparatus is of a MOS type, and the first and second shift registers are laid out in a same direction.

21. (Previously presented) The solid state imaging apparatus of claim 5, wherein the solid state imaging apparatus is of a MOS type, and the operation switching circuit comprises a plurality of MOS transistors selected by a plurality of gate signal lines.

22. (Previously presented) The solid state imaging apparatus of claim 4, wherein the first shift register sequentially outputs all the pixel signals having color filters of the different colors from one another.

23. (Previously presented) The solid state imaging apparatus of claim 5, wherein the first signal transmission method sequentially outputs all the pixel signals having color filters of the different colors from one another.

24. (Cancelled)

25. (New) The solid state imaging apparatus of claim 4, wherein the first shift register outputs the selection signals in number order, and the second shift register outputs the selection signals, changing the order partially.

26. (New) The solid state imaging apparatus of claim 4, wherein the second shift register outputs signals of all of the pixels without thinning.

27. (New) The solid state imaging apparatus of claim 4, wherein

the solid state imaging apparatus is a MOS type solid state imaging apparatus, and MOS transistors are used in the first and second shift registers.

28. (New) The solid state imaging apparatus of claim 5, wherein  
in the first signal transmission method, the shift register outputs the selection signals in number order, and  
in the second signal transmission method, the shift register outputs the selection signals, changing the order partially.

29. (New) The solid state imaging apparatus of claim 5, wherein  
the second signal transmission method outputs signals of all of the pixels without thinning.

30. (New) The solid state imaging apparatus of claim 5, wherein  
the solid state imaging apparatus is a MOS type solid state imaging apparatus, and a MOS transistor is used in the shift register.

31. (New) A solid state imaging apparatus, comprising:  
a plurality of pixels arranged two-dimensionally wherein each of the plurality of pixels has a color filter having a different color from color filters of adjacent pixels in a row or a column; and  
a pair of shift registers for outputting selection signals, which drive each pixel, to a single line pixel group of the plurality of pixels,

wherein each of the pair of shift registers includes a scanning start terminal for switching between the two shift registers when outputting the selection signals from the shift register to the single line pixel group,

the first shift register of the pair of shift registers outputs the selection signals in number order, and

the second shift register of the pair of shift registers outputs the selection signals, changing the order partially.

32. (New) The solid state imaging apparatus of claim 31, wherein  
the first shift register performs a first operation outputting all of the pixels included in the single line pixel group, and  
the second shift register performs a second operation continuously outputting some of the pixels included in the single line pixel group and having color filters of a same color.

33. (New) The solid state imaging apparatus of claim 31, wherein  
the second shift register outputs signals of all of the pixels without thinning.

34. (New) The solid state imaging apparatus of claim 31, wherein  
the solid state imaging apparatus is a MOS type solid state imaging apparatus, and  
MOS transistors are used in the first and second shift registers.

35. (New) A solid state imaging apparatus, comprising:

a plurality of pixels arranged two-dimensionally wherein each of the plurality of pixels has a color filter having a different color from color filters of adjacent pixels in a row or a column;

a shift register for outputting selection signals, which drive each pixel, to a single line pixel group of the plurality of pixels; and

an operation switching circuit for switching between two signal transmission methods when outputting the selection signals from the shift register to the single line pixel group,

wherein in the first signal transmission method of the two signal transmission methods, the shift register outputs the selection signals in number order, and

in the second signal transmission method of the two signal transmission methods, the shift register outputs the selection signals, changing the order partially.

36. (New) The solid state imaging apparatus of claim 35, wherein

the first signal transmission method provides a first operation outputting all of the pixels included in the single line pixel group, and

the second signal transmission method provides a second operation continuously outputting some of the pixels included in the single line pixel group and having color filters of a same color.

37. (New) The solid state imaging apparatus of claim 35, wherein

the second signal transmission method outputs signals of all of the pixels included in the single line pixel group without thinning.



38. (New) The solid state imaging apparatus of claim 35, wherein the solid state imaging apparatus is a MOS type solid state imaging apparatus, and a MOS transistor is used in the shift register.